



COPY OF PA
ORIGINAL FILE

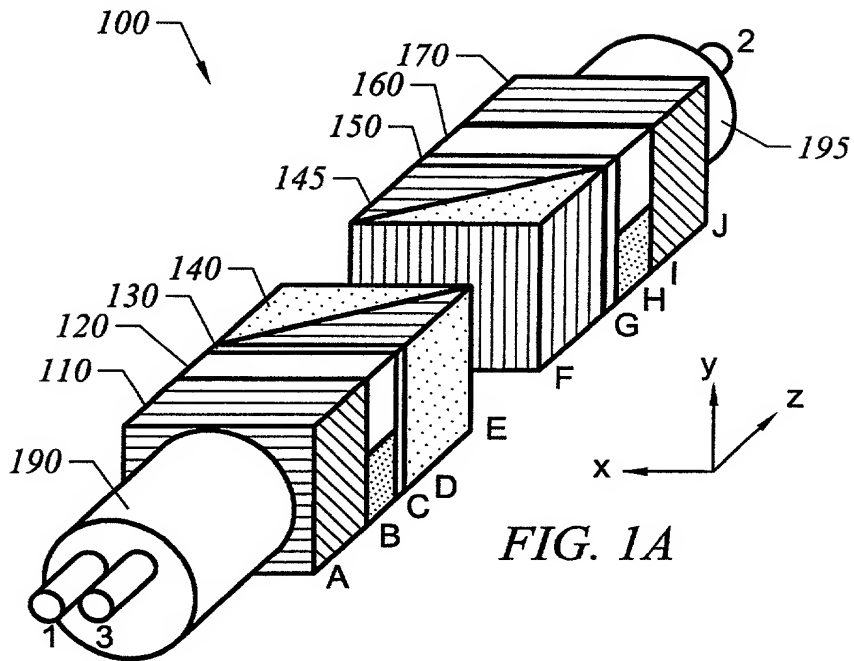


FIG. 1A

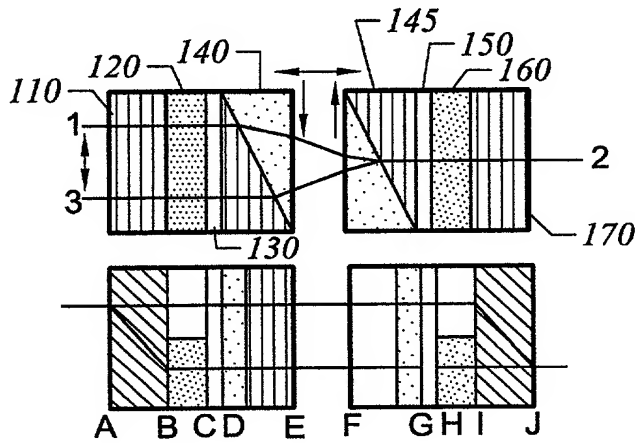


FIG. 1B

FIG. 1C

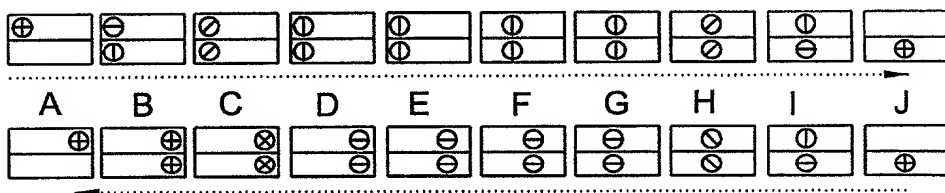
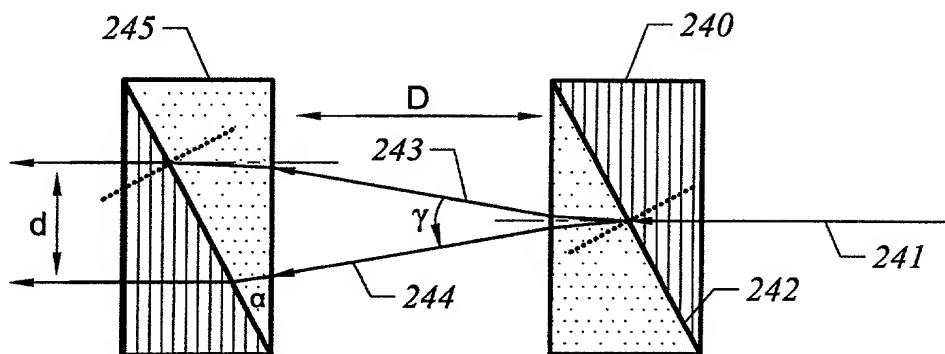


FIG. 1D

100896.07310



COPY OF PAGE
 ORIGINALLY FILED
 2/17



$$d \approx 2D \tan(\gamma/2) = 2D \tan\{\arcsin[(n_o - n_e)\tan(\alpha)]\}$$

Example: $\alpha = 30^\circ$, $\Delta n = 0.2$, $D = 2\text{mm} \rightarrow d = 0.4\text{mm}$
 $4\text{mm} \rightarrow 0.8\text{mm}$

FIG. 2

3/17

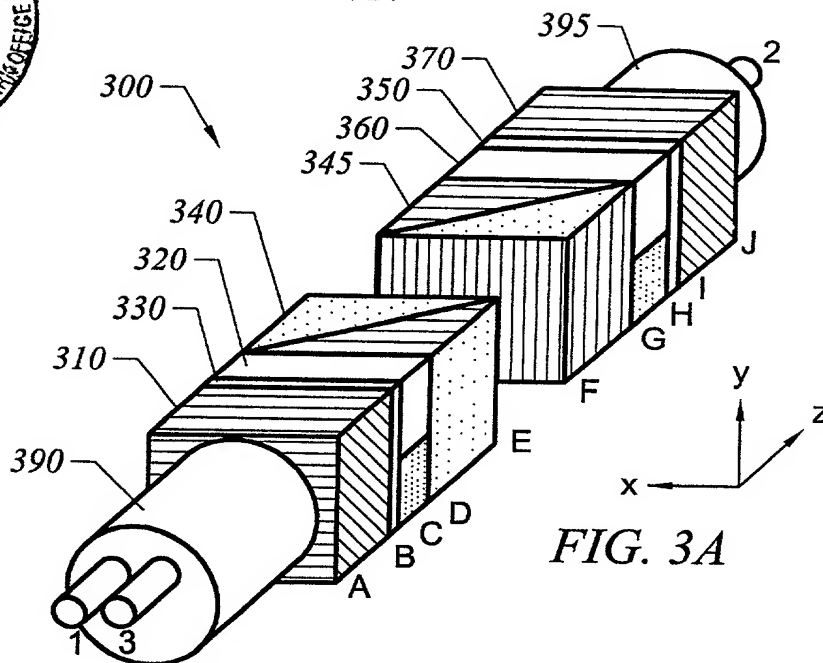


FIG. 3A

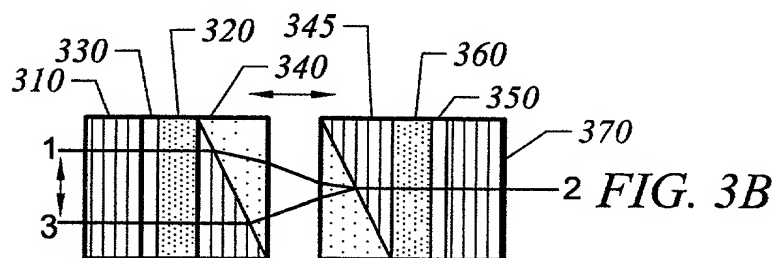


FIG. 3B

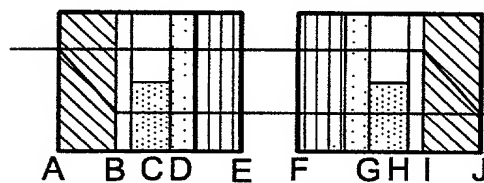


FIG. 3C

\oplus	\ominus	\otimes	\odot	\oplus	\oplus	\oplus	\oplus	\otimes	\oplus	\oplus
A	B	C	D	E	F	G	H	I	J	
\oplus	\ominus	\otimes	\odot	\oplus	\oplus	\oplus	\oplus	\otimes	\oplus	\oplus

FIG. 3D

2016/07/26 09:50:00



4/17

COPY OF PAPERS
ORIGINALLY FILED

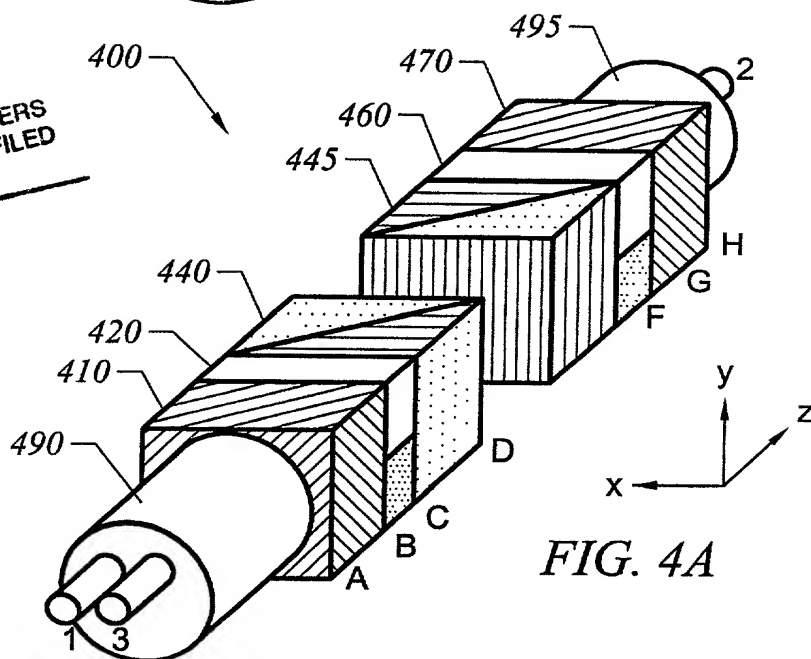


FIG. 4A

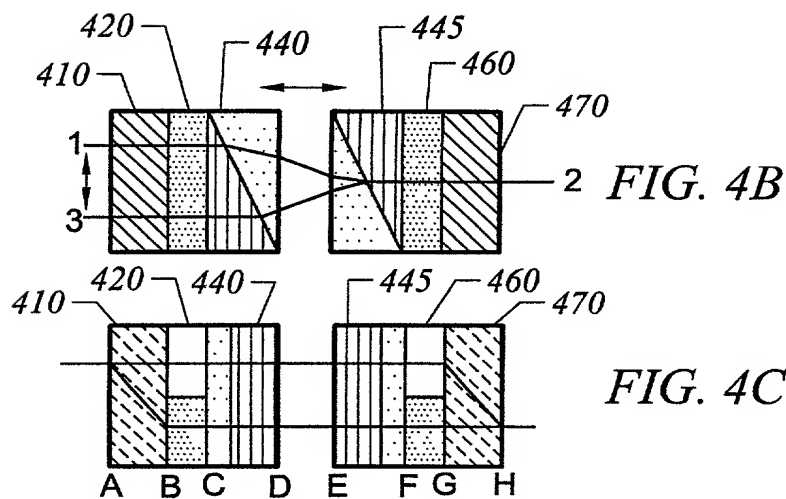


FIG. 4C

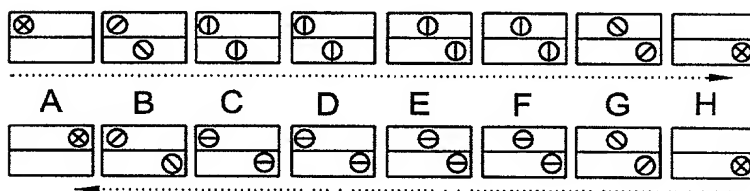
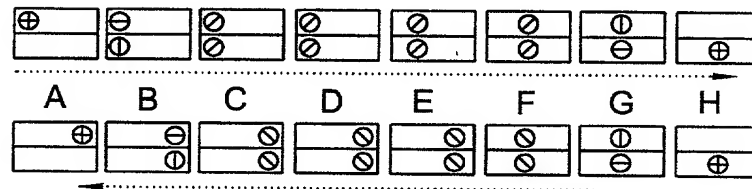
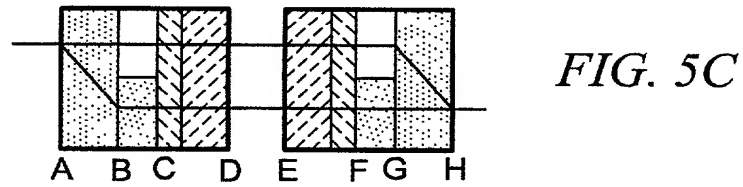
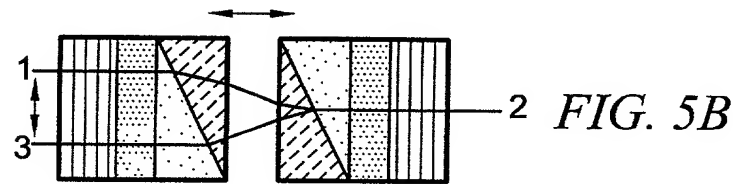
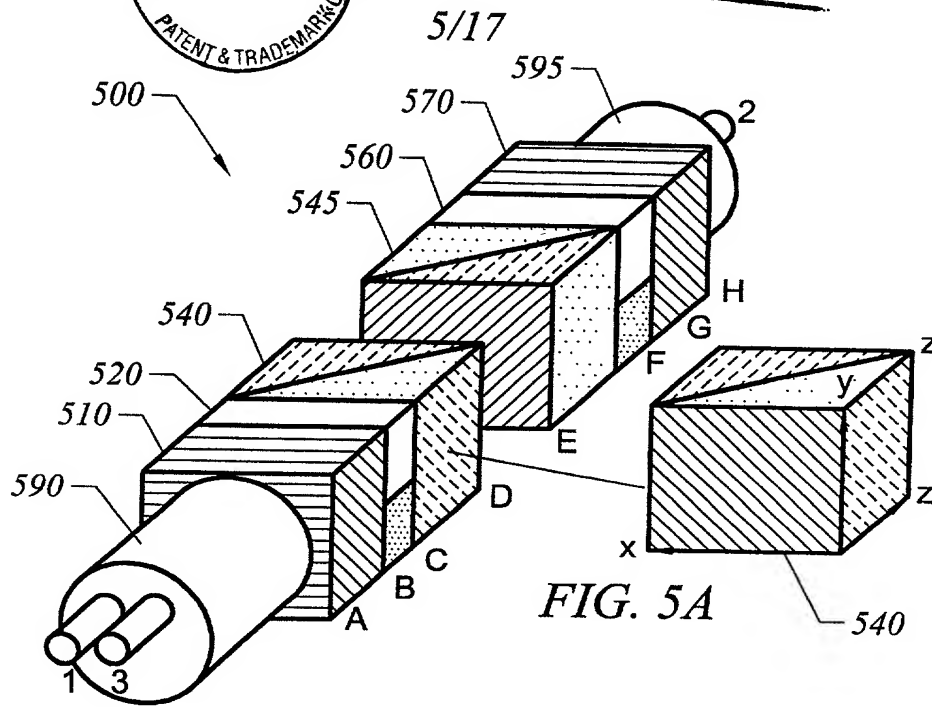


FIG. 4D

201E20 96283001



COPY OF PAPERS
ORIGINALLY FILED



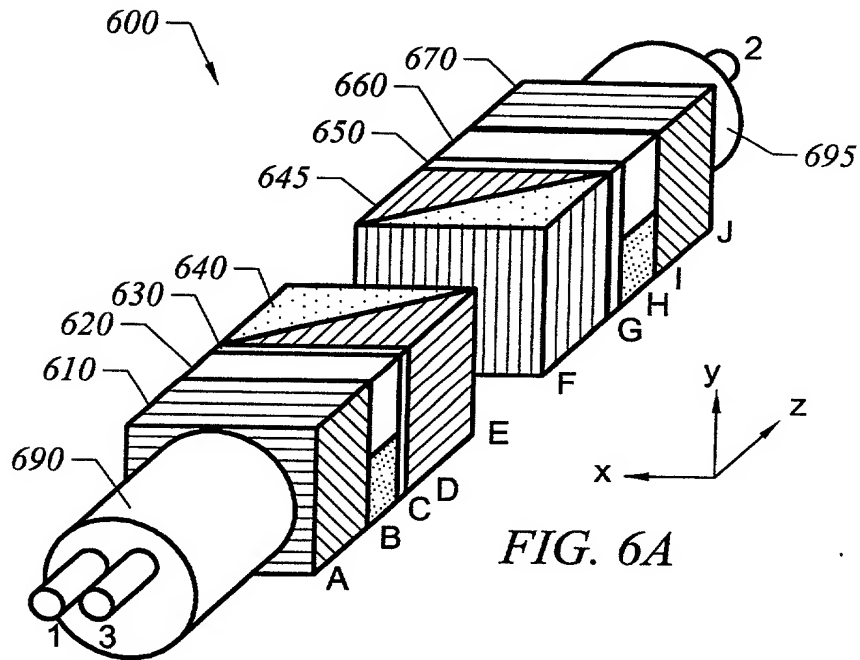


FIG. 6A

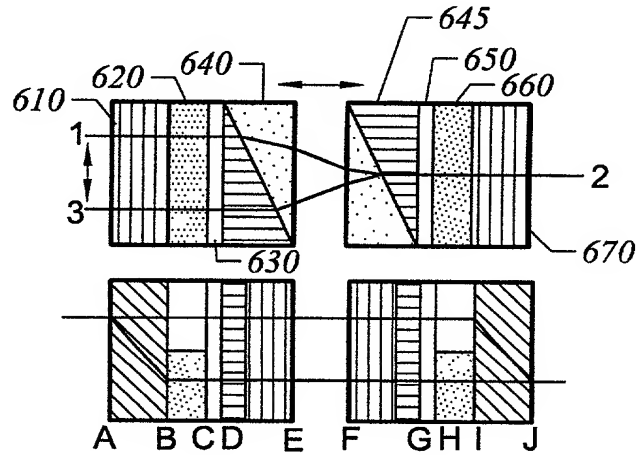


FIG. 6B

FIG. 6C

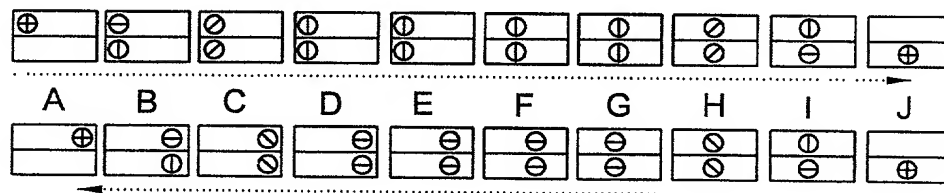


FIG. 6D



COPY OF PAPER
ORIGINALLY FILED

7/17

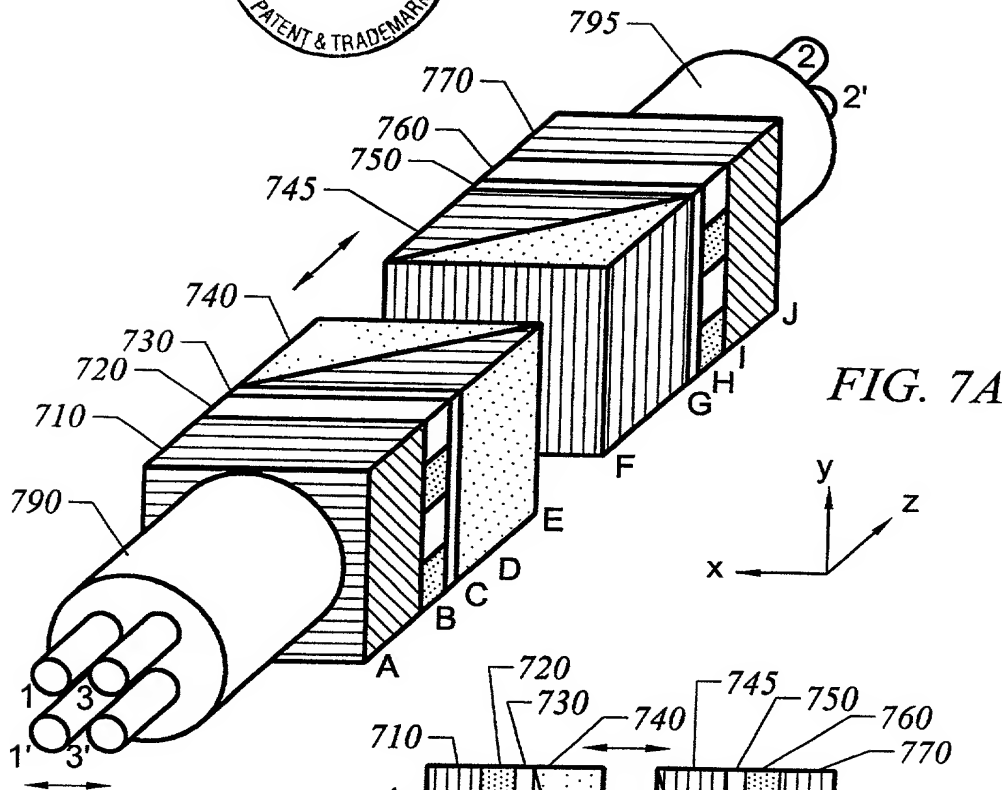


FIG. 7A

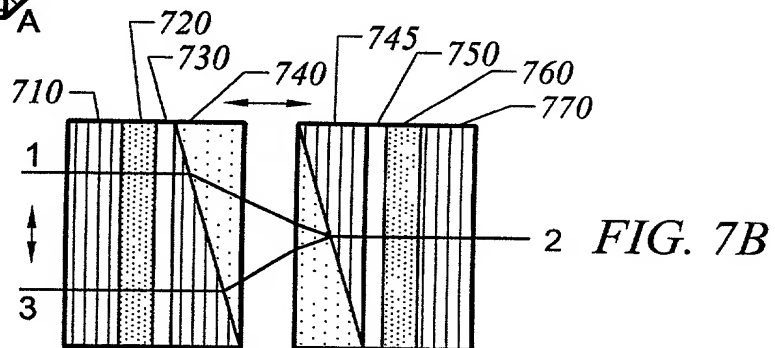


FIG. 7B

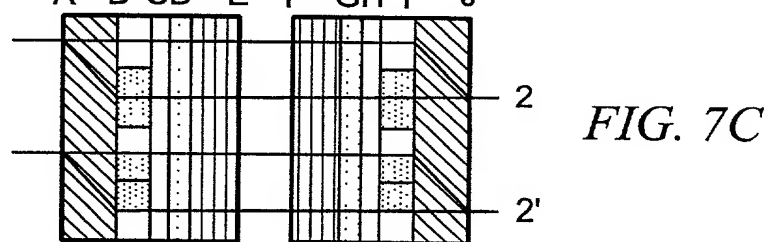


FIG. 7C

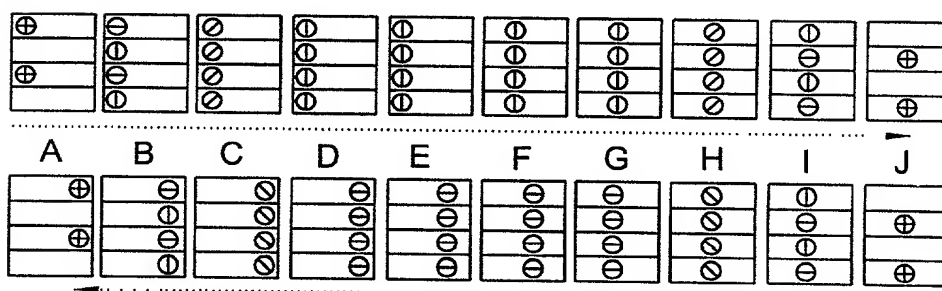


FIG. 7D



8/17

COPY OF PAPER
ORIGINALLY FILED

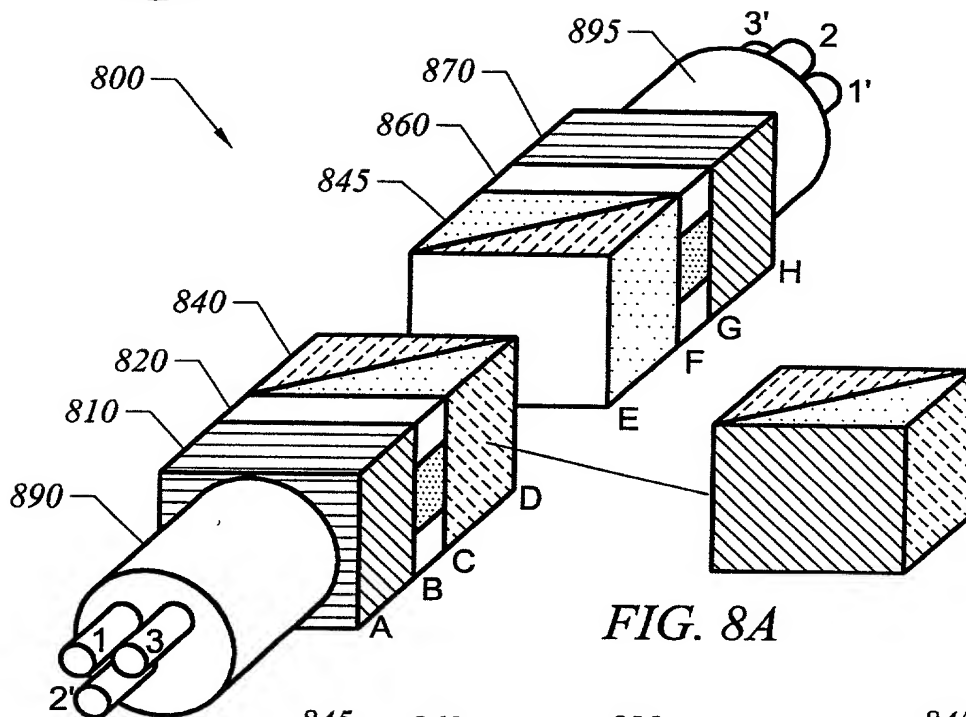


FIG. 8A

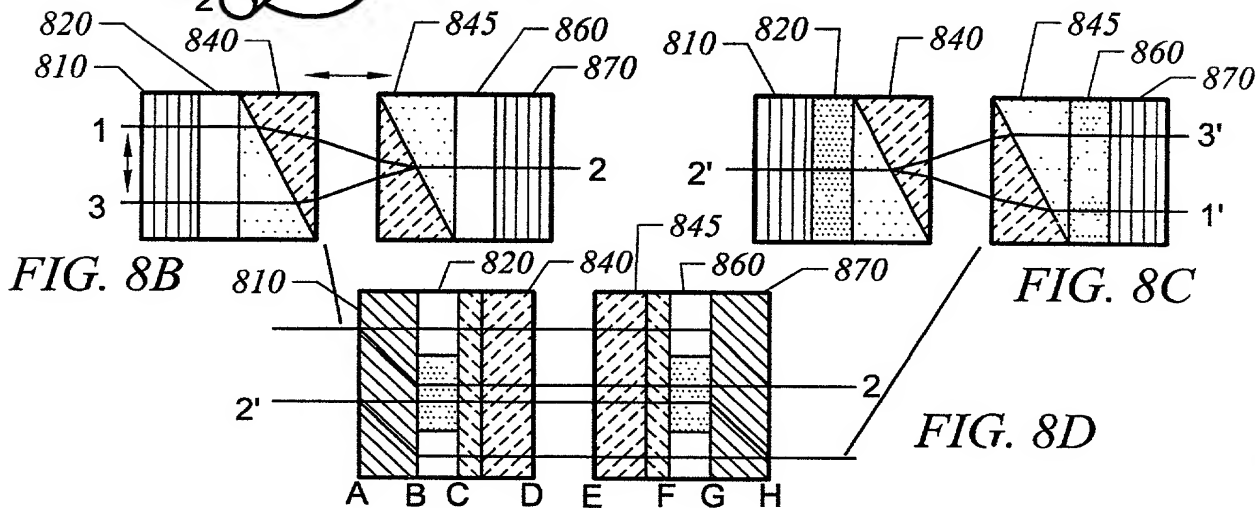


FIG. 8B

FIG. 8C

FIG. 8D

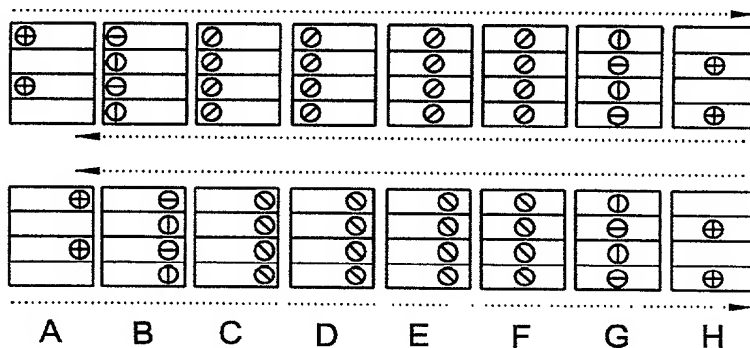


FIG. 8E



9/17

COPY OF PAPER
ORIGINALLY FILED

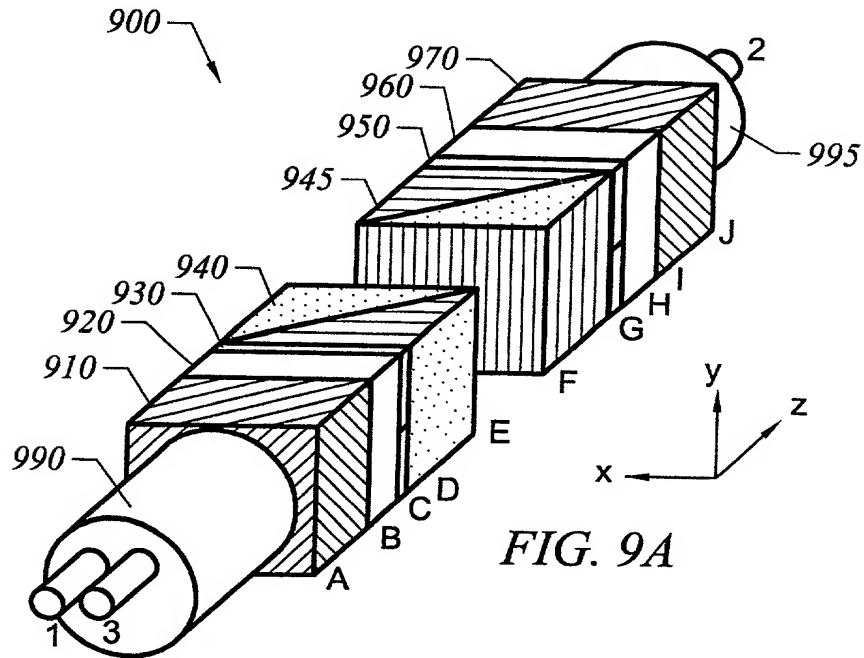


FIG. 9A

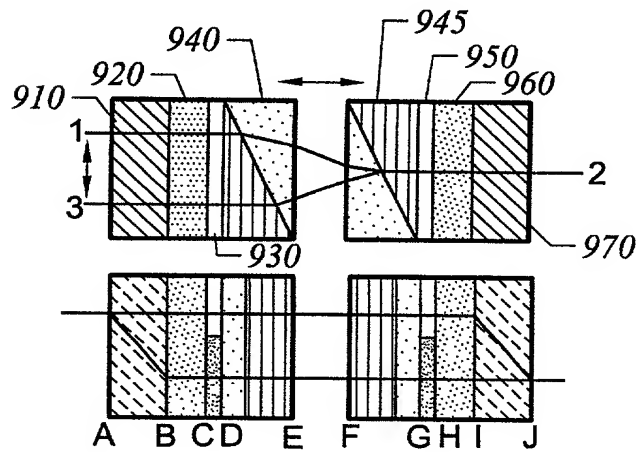


FIG. 9B

FIG. 9C

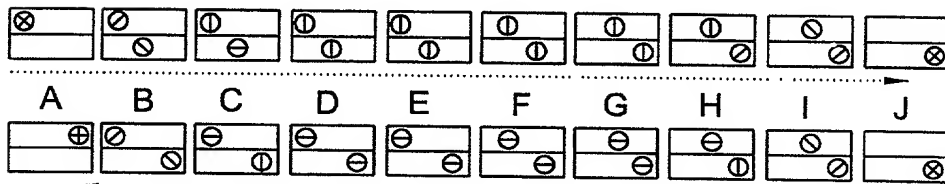


FIG. 9D



10/17

COPY OF PAPER
ORIGINALLY FILED

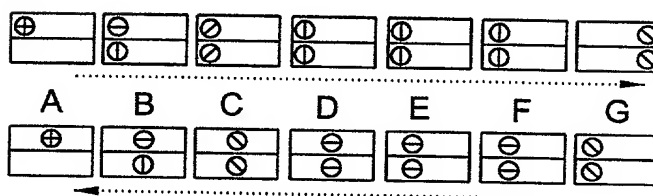
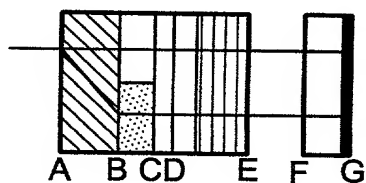
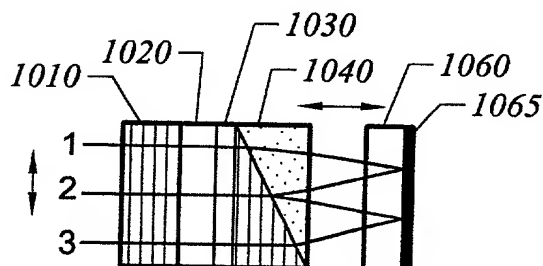
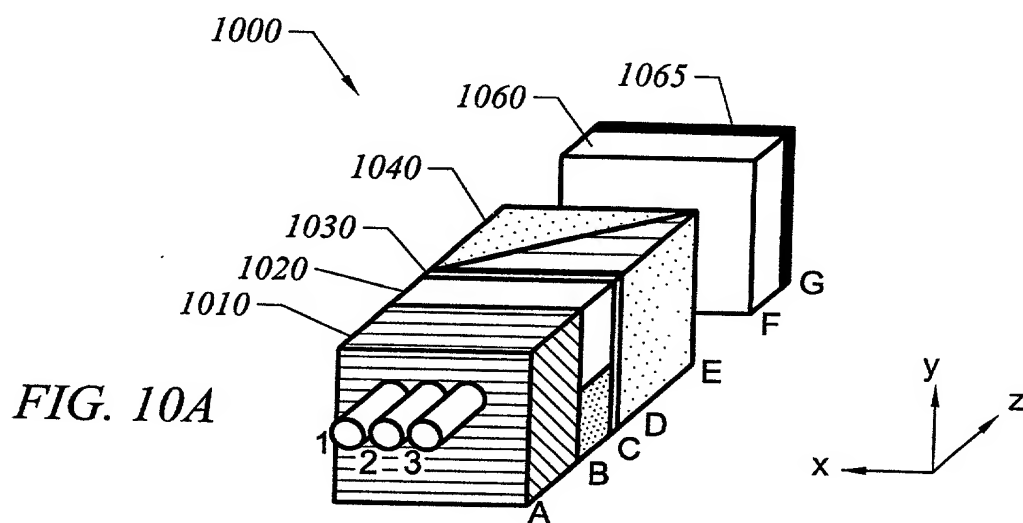


FIG. 10D



11/17

COPY OF PAPERS
ORIGINALLY FILED

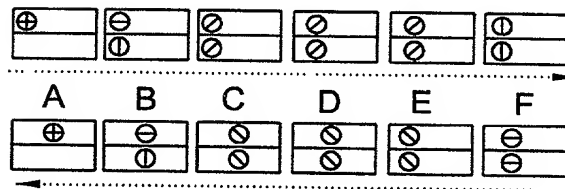
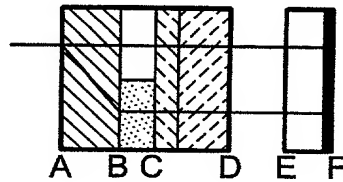
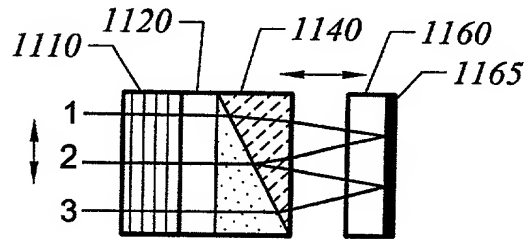
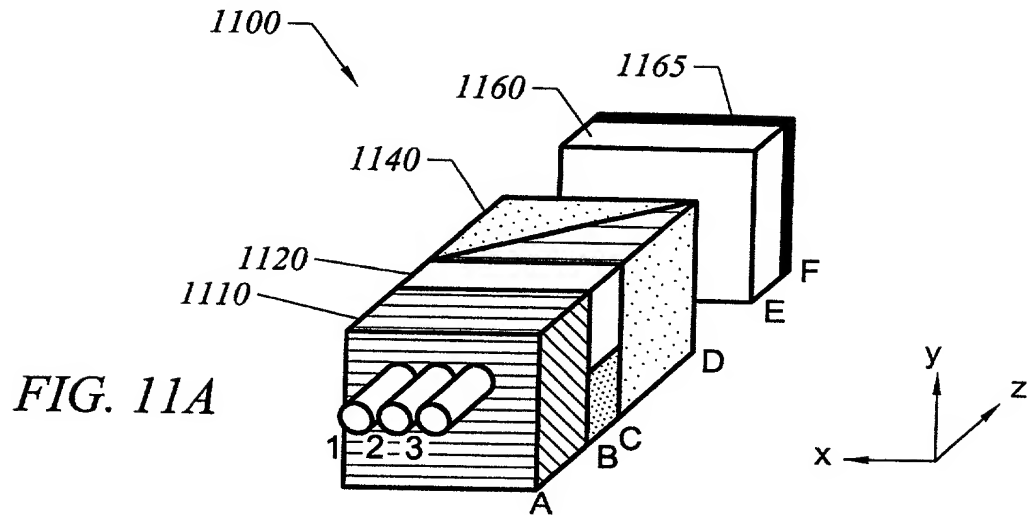


FIG. 11D

201E20" 9648900T



12/17

COPY OF PAPER
ORIGINALLY FILED

Fabrication Process of a Circulator Array

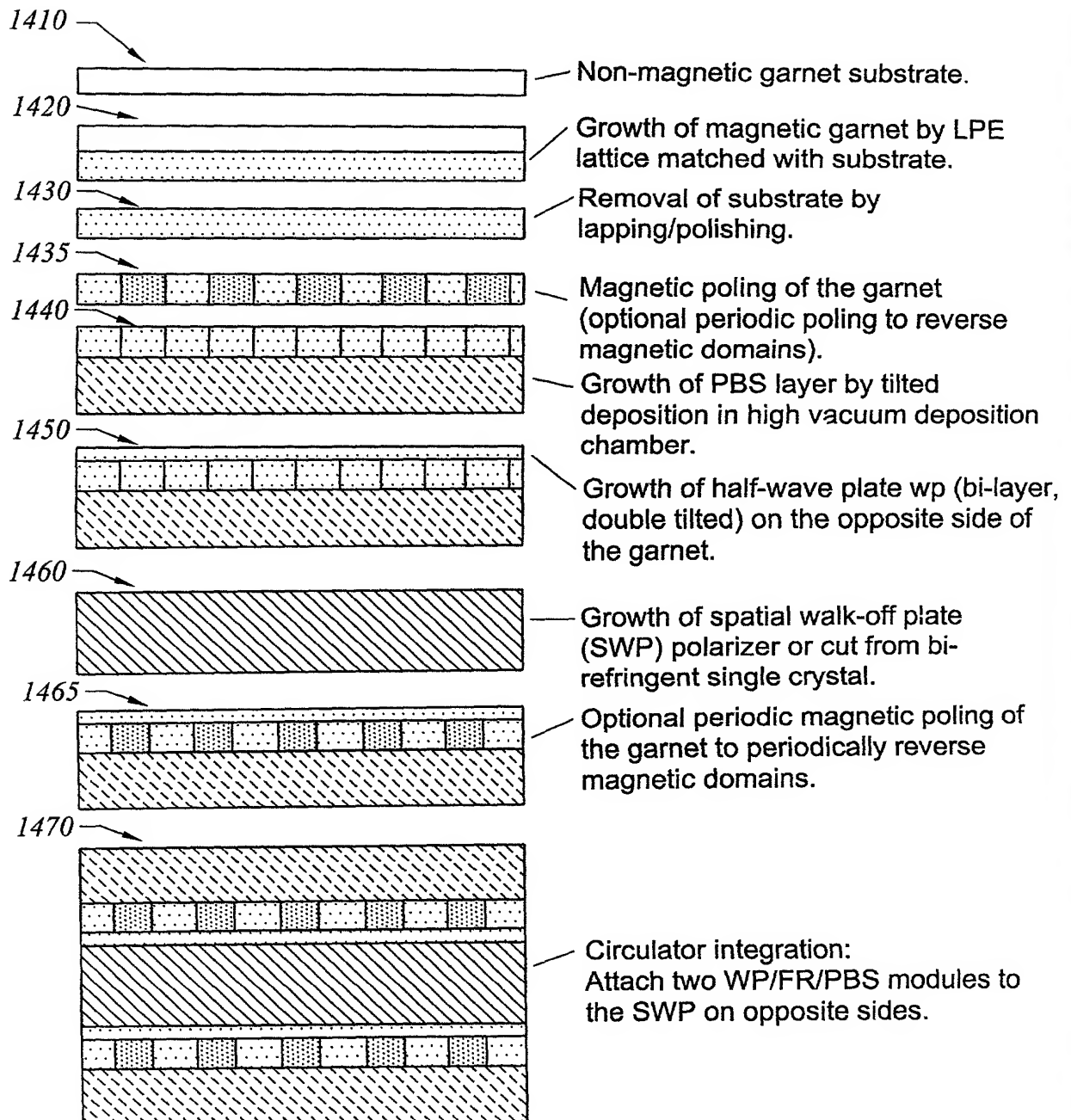


FIG. 12

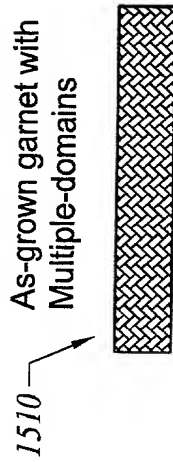
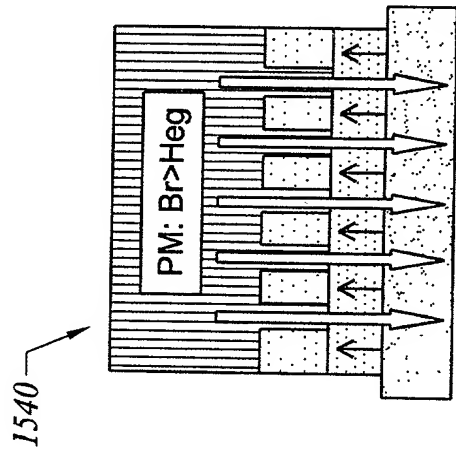


FIG. 13A



Cold poling: Only those domains contacting the magnetic tips are magnetically reversed.

FIG. 13D

Initial poling in high field

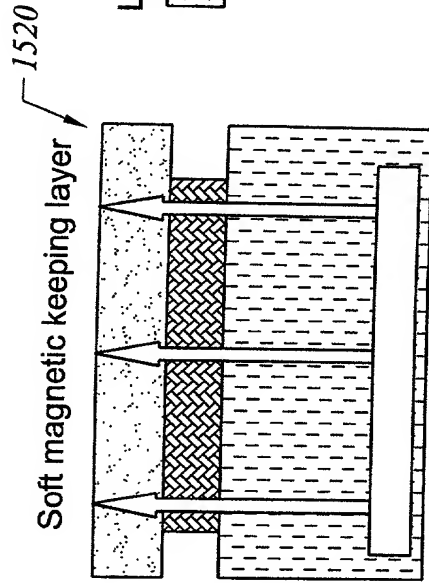


FIG. 13B

Second (periodical) poling

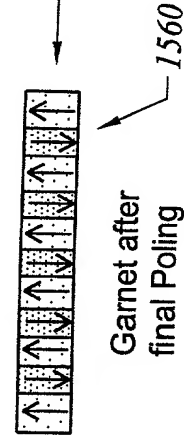


FIG. 13E

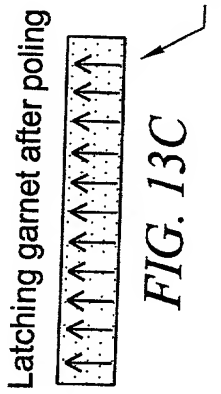
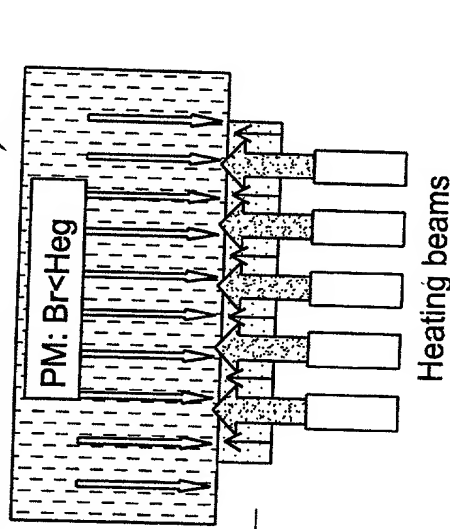


FIG. 13C



Hot poling: Only those domains illuminated by the heating beams are magnetically reversed.

FIG. 13F

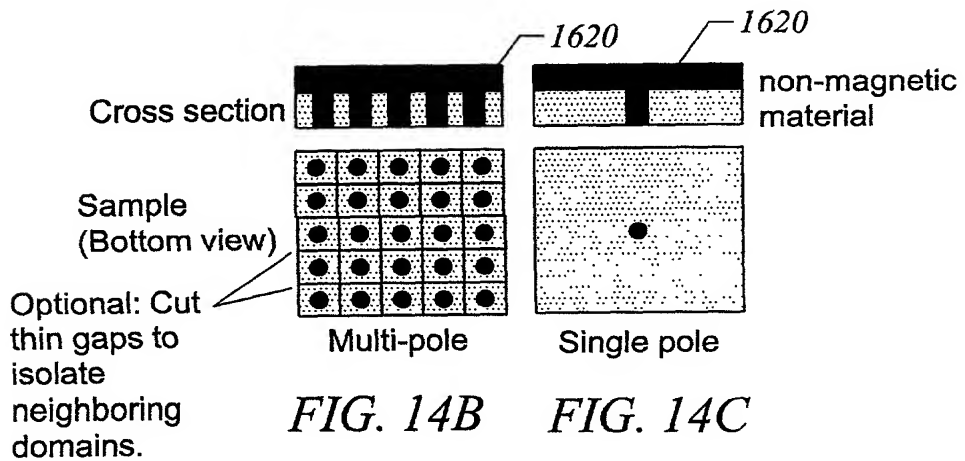
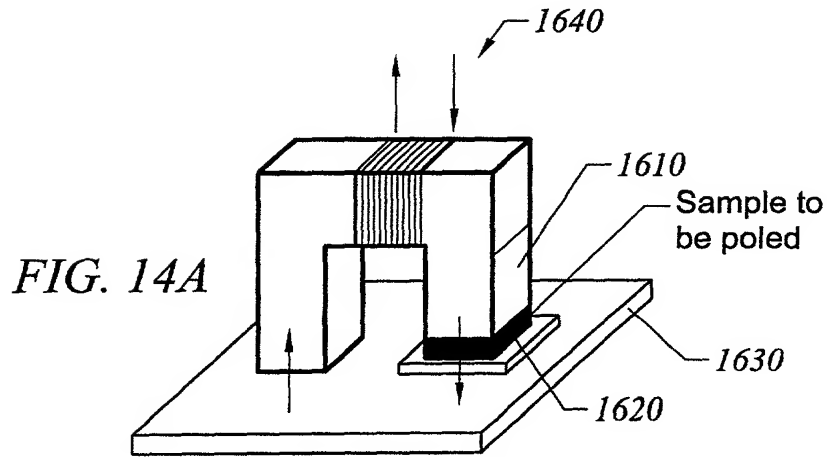




14/17

COPY OF PAGE
ORIGINALLY FILED

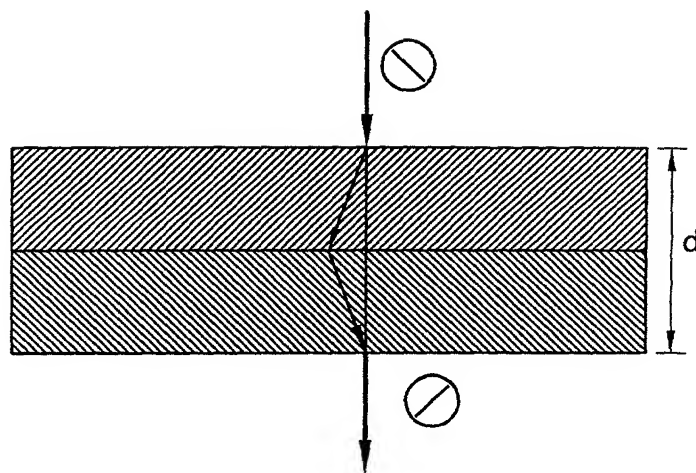
Magnetic (Periodic) Poling of Faraday Rotator





15/17

COPY OF PAPER...
ORIGINALLY FILED



Waveplate from bi-directionally obliquely deposited films

Half wave plate : $\Delta n \cdot d = \lambda/2$

The half-wave plate is capable of rotating a linearly polarized light by 2θ (where θ is the direction of polarization with respect to the optical axis before entering the wave plate).

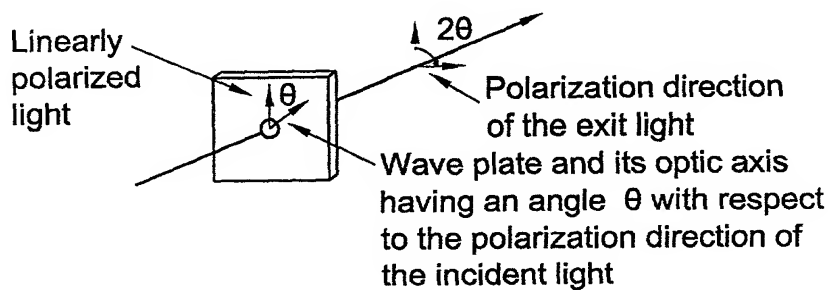


FIG. 15

20150709 073102



16/17

COPY OF PAPERS
ORIGINALLY FILED

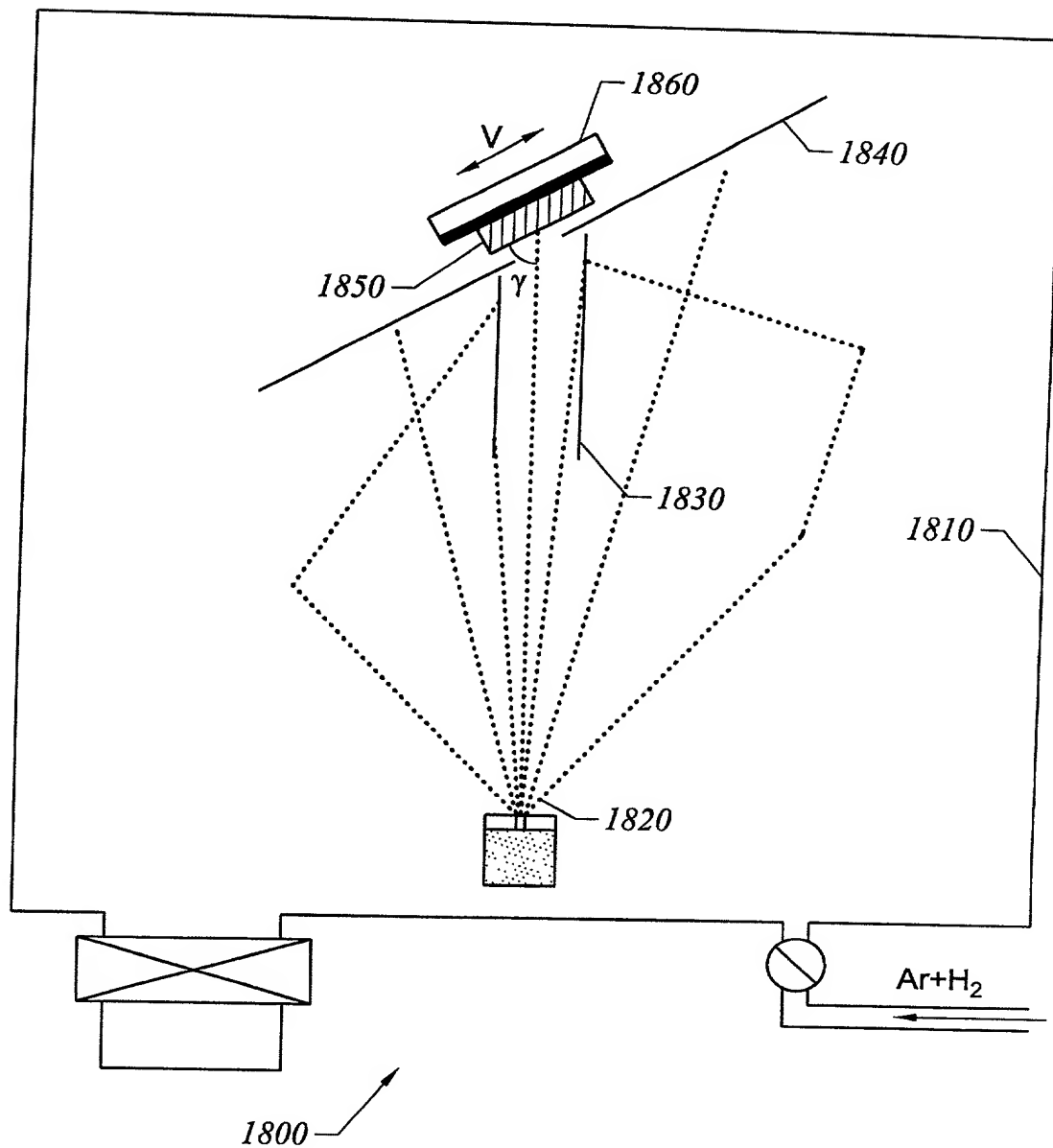


FIG. 16



17/17

COPY OF PAPER
ORIGINALLY FILED

Fabrication Process of a Circulator Array

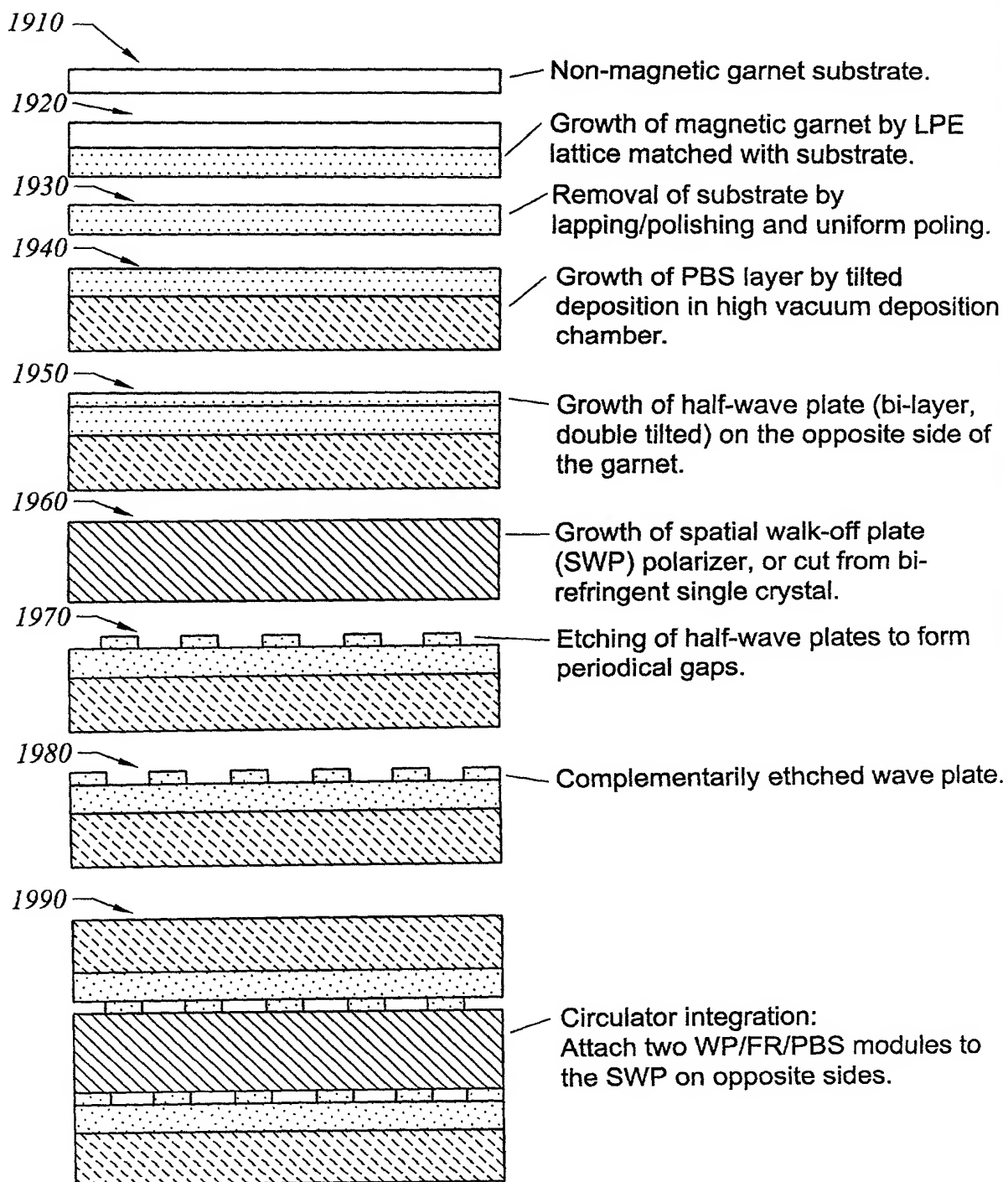


FIG. 17